



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,330	08/16/2001	Frank Reil	99/G-002 CIP (5587*318)	5196

23416 7590 09/25/2003

CONNOLLY BOVE LODGE & HUTZ, LLP
P O BOX 2207
WILMINGTON, DE 19899

EXAMINER

SHOSHO, CALLIE E

ART UNIT	PAPER NUMBER
----------	--------------

1714

DATE MAILED: 09/25/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/931,330

Applicant(s)

REIL, FRANK

Examiner

Callie E. Shosho

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 32-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 37 is/are allowed.
- 6) ☒ Claim(s) 32 and 47-49 is/are rejected.
- 7) ☒ Claim(s) 33-36 and 38-46 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

Art Unit: 1714

DETAILED ACTION

1. All outstanding rejections are overcome in light of applicants' amendment filed 7/7/03 which cancels all pending claims.

The following action is necessitated by applicants' amendment and thus, the action is final.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 32 and 47-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pinho et al. (U.S. 2002/0056707) in view of Yamada et al. (U.S. 5,540,998).

Pinho et al. disclose composition comprising thermoplastic polymer as well as nonabsorbing dyes which are used in combination to produce black color. It is disclosed that the

composition is transparent to laser light. Dyes such as blue, red, and yellow are combined to form black color. There is also disclosed a method for joining different types of materials by laser welding method wherein one material transmits the laser light to other material which absorbs the laser light and produces heat which allows the two different materials to bond (paragraphs 6, 15, 26, 28-29, and 32).

The difference between Pinho et al. and the present claimed invention is the requirement in the claims of specific combination of dyes.

Pinho et al. disclose combining different color pigment or dye to form black color.

Yamada et al., which is drawn to coating composition, disclose combining yellow and violet pigment to form black color and that such combination has high reflective radiance in the region wherein the wavelength is from 780 nm and higher. Further, Yamada et al. disclose the combination of any of red, orange, yellow, green, blue and purple colors in order to produce such black color (col.3, line 61-col.4, line 9 and col.4, lines 10-27). Given that laser light has wavelength which varies from 325 nm (helium-cadmium laser)-830 nm (semiconductor laser), it is clear that such combinations are translucent to laser light.

In light of the above and given Pinho et al.'s disclosure of the equivalence and interchangeability of pigment and dye, it therefore would have been obvious to one of ordinary skill in the art to use combination of dyes in Pinho et al. including yellow and violet as well as red, yellow and green in order to produce black thermoplastic composition which transmits laser light, and thereby arrive at the claimed invention.

Response to Arguments

4. Applicants' arguments filed 7/7/03 have been fully considered but they are not persuasive.

Specifically, applicants argue that Pinho et al. is no longer a relevant reference against the present claims in light of the submission of English translation of foreign priority document which establishes effective filing date of 2/18/99 for black polyester molding composition. Given that Pinho et al. has filing date of 4/30/99, applicants argue that they have antedated Pinho et al. and thus, the reference is no longer applicable against the present claims.

Under MPEP 706.02(b), rejections based on 102(e) can be overcome by perfecting the filing date of the priority document. Applicants have submitted certified priority document in parent application 09/505,790 and the certified translation of the priority document on 7/7/03.

However, it is the examiner's position that present claims 32 and 47-49, against which Pinho et al. is used, are not entitled to the priority date of 2/18/99 and that applicant has not established effective filing date of 2/18/99 for these claims given that claims 32 and 47-49 are drawn to black thermoplastic molding composition while the foreign priority document is drawn to black polyester molding document. That is, while the present claims are open to all types of thermoplastics, i.e. polystyrene, polycarbonate, polyester, polyamide, etc., the foreign priority document is limited to only polyester. Thus, while applicants have established effective filing date of 2/18/99 for polyester molding composition, this filing date has not been established for any type of thermoplastic molding composition as is set forth in the claims 32 and 47-49

Further, there does not appear to be any disclosure in the foreign priority document of

laser welding thermoplastic molding composition with different thermoplastic material colored with absorbing dyes, pigments, or absorbing fillers as required in present claim 49.

Thus, it is the examiner's position that applicants are not entitled to the benefit of the foreign priority date with respect to the disclosures set forth in present claims 32 and 47-49 and thus, Pinho et al. remains a relevant reference against these claims.

Allowable Subject Matter

5. Claim 37 is allowed over the "closest" prior art Pinho et al. (U.S. 2002/0056707) given that while Pinho et al. disclose the use of thermoplastic polymer that is polyolefin such as polyethylene or polypropylene, there is no disclosure of thermoplastic polymer that is cycloolefin copolymer, polystyrene, styrene-acrylonitrile, polycarbonate, polyacrylate, polyester, or polyamide as presently claimed.

6. Claims 33-36 and 38-46 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 33-36 and 38-46 would be allowable if rewritten in independent form as described above for the following reasons.

Pinho et al. (US 2002/0056707) disclose composition comprising thermoplastic polymer as well as nonabsorbing dyes which are used in combination to produce black color. It is disclosed that the composition is transparent to laser light. Dyes such as blue, red, and yellow are combined to form black color. However, there is no disclosure or suggestion of using

chinophthalone or anthrachinone dyes as presently claimed or any disclosure or suggestion of using specific yellow or violet dyes as set forth in claims 34-36 and 45-46. Further, while Pinho et al. disclose the use of thermoplastic polymer that is polyolefin such as polyethylene or polypropylene, there is no disclosure of thermoplastic polymer that is cycloolefin copolymer, polystyrene, styrene-acrylonitrile, polycarbonate, polyacrylate, polyester, or polyamide as presently claimed. Further, there is no disclosure or suggestion in Pinho et al. regarding the amounts of dye used.

Yamada et al. (U.S. 5,540,998) disclose composition comprising thermoplastic polymer as well as yellow and violet pigments which are used in combination to produce black color that is translucent to laser light. However, there is no disclosure of using nonabsorbing dyes as presently claimed. Thus, there is no disclosure or suggestion in Yamada et al. regarding the amounts of dye used as presently claimed.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

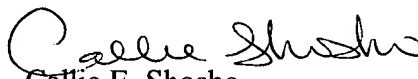
Art Unit: 1714

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 703-305-0208. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


Callie E. Shosho
Primary Examiner
Art Unit 1714

CS
9/22/03